

Amendments to the Specification:

Please amend the title section of the application as follows:

TITLE OF THE INVENTION

Infrared Emitter Element ~~and its use~~ with Cooling Cube Covered by Reflector

Please insert paragraphs [0022] and [0039] to read as follows, incorporating the handwritten notations of the inventors in the original application:

[0022] A use of the infrared emitter element according to the invention as a through-flow heater for an especially high-purity liquid, particularly for high-purity or ultra-pure water, or gases is ideal. Here, the terms high-purity or ultra-pure water are understood to mean water that corresponds to the standards of ASTM D1193-99E1, Type I (chemical impurities) and/or Type A (microbiological contamination) and ASTM D5127-99 Type E1, E1.1 and E1.2. Here, the liquid or the gas flows through the at least one channel between the cooling tube and the emitter tube and is heated by the at least one radiation source. The flow of fluids in the cooling tube here should preferably be turbulent at high outputs of the IR emitter employed, in order to guarantee sufficient heat transport from the emitter tube by convection and to prevent boiling of the fluid at the emitter tube. The infrared emitter element requires no additional cooling besides the fluid to be heated. Therefore, the construction of the through-flow heater is compact, it can be manufactured with low production expense, and it exhibits extremely low susceptibility to failures. At the same time, however, such a through-flow heater has a high efficiency and a high output and is easy to maintain or exchange due to its simple construction.

[0039] In a preferred embodiment, an electrical output of 6 kW is applied by the infrared emitter element according to Figs. 1 and 1A. This is generated by two electrical conductors arranged in a twin tube and formed from tungsten coils, which operate at an emission temperature of about 2600°K. The efficiency (expended electrical output to heating output) of such an arrangement is high at >95%, according to which there are only a few regions in which power losses can occur. The full output of the infrared emitter element is reached according to though-flow within 10 seconds up to 2 min. The full output of the radiation source is reached after 1 to 2 seconds.